PRB

Family Planning Saves Lives

Third Edition



byBARBARA SHANE

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Previous editions of Family Planning Saves Lives

The first edition of Family Planning Saves Lives, published in 1986, provided valuable information to policymakers, program planners, and journalists on the health benefits of family planning. In response to the overwhelming demand for the first and second editions (published in 1991), PRB is pleased to present the third edition of Family Planning Saves Lives. While the message has not changed, the new edition provides data from the latest research on maternal and child health in developing countries. It also includes new information on the linkages between family planning and the 1994 International Conference on Population and Development, reproductive health, adolescents, and abortion.

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Overview

revery minute of every day at least one woman dies from complications of pregnancy and childbirth—more than 585,000 deaths every year. Every day more than 31,000 children under age five die in developing countries.

Family planning can prevent many of these deaths by enabling women to bear children during the healthiest times for themselves and their children.

Family planning allows couples to decide how many children to have and when to have them. The careful planning of births saves lives.

- Family planning can prevent at least 25 percent of all maternal deaths by allowing women to delay motherhood; prevent unintended pregnancies and unsafe abortions; protect themselves from sexually transmitted diseases (STDs), including Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS); and stop childbearing when they have reached their reproductive goals.
- By spacing births at least two years apart, family planning can prevent an average of one in four infant deaths in developing countries. Adequate birthspacing also can improve the survival of the next older brother or sister.
- Family planning can significantly improve the health and survival of adolescent girls by allowing them to postpone childbearing until the healthiest times for themselves and their children.

There is a safe and effective family planning method for every woman that allows her to protect her health and the health of her children.

Millions of lives are saved every year because more than half of all couples in the developing world are using family planning

to achieve their desired number and spacing of children. Yet, the need for family planning—and the ability to save more lives—continues to grow. An estimated 150 million women in developing countries want to delay or stop childbearing, but are not using family planning. Meeting just the



existing demand for family planning could reduce the number of maternal deaths and injuries by up to 20 percent.

At an average cost of less than US\$2 per capita per year, family planning offers a safe, affordable, and effective way to stop the tragedy of needless maternal and child deaths. Governments around the world are committed to improving the survival of women and children. The next step is to translate goals into actions, and enable all couples to plan their families and have healthy children.

Infant and **Child Survival**

Causes of Infant and Child Deaths

nfant and child mortality rates have fallen significantly in every region of the world since 1960 (see Table 1). Improvements in basic services and the use of low-cost. preventive, and curative health technologies save the lives of millions of children every

The lives of millions of infants and saved every year by spacing births at least two years apart.

year. Despite the advances in child survival, an estimated 31,000 children under age five still die every day-more than 11 million children every year.¹ Respiratory infections, **children can be** diarrhea, malaria, measles, and malnutrition are the major causes of children's deaths in developing countries, yet these same diseases rarely kill children in more developed countries.

> Children do not usually die of one disease, but suffer

from the effects of interacting factors that cause them to spiral from illness to death. Malnutrition is a major problem contributing to child mortality. Half of all child deaths are thought to be associated with malnutrition.² Many of these deaths can be prevented through vaccination, adequate nutrition, safe water and sanitation, and family planning.

Role of Family Planning in Child Survival

Family planning is an important part of the effort to improve child survival. The lives of millions of infants and children can be saved every year by spacing births at least two years apart, by helping women bear children during their healthiest reproductive years, and by enabling women to have their desired number of children.

Babies born less than two years after their next oldest brother or sister are twice as likely to die in the first year as those born after an interval of at least two years (see *Chart 1).* In developing countries, closely spaced pregnancies are more likely to result in low birth-weight babies who are more vulnerable to infection and thus less likely to survive.³ Even if they survive the first year,

TABLE

Infant Mortality Rates

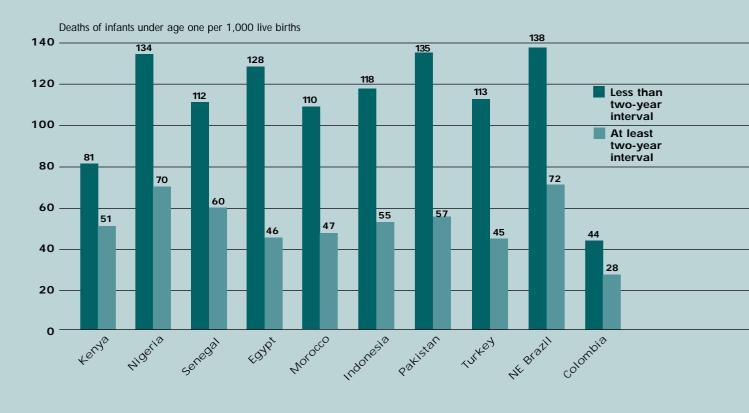
(The number of deaths of infants under one year of age per 1,000 live births in one year)

1960	1994	
31	7	
138	68	
153	107	
156	48	
146	84	
133	42	
106	38	
26	8	
	31 138 153 156 146 133 106	31 7 138 68 153 107 156 48 146 84 133 42 106 38

SOURCE: UNICEF, The State of the World's Children, 1996 (Oxford and New York: Oxford University Press, 1996).

CHART 1

Infant Mortality by Birth Interval



SOURCE: Unpublished analysis of Demographic and Health Surveys, 1990-1995 (Calverton, MD: Macro International, 1996).

these children are almost one and one-half times more likely to die before age five than children whose births were spaced at least two years apart.

Closely spaced births also endanger the next oldest sibling. If the mother of an infant becomes pregnant again too soon,

she may discontinue breastfeeding, putting her infant at greater risk of illness and death (see Box 1, next page). Diseases spread more easily in households with many young children. Poor sanitation, lack of clean

Breastfeeding Saves Lives

It is estimated that breastfeeding saves the lives of 6 million infants every year. Infants who are breastfed for at least six months are significantly less likely to become ill or die due to diarrhea and acute respiratory infections. If more women were encouraged to feed their infants only breastmilk for the first six months and to breastfeed for at least one year, an additional 1 to 2 million lives could be saved each year. In addition to its protective health effects, breastmilk provides the ideal nutrition for infants for the first six months.

Breastfeeding also improves women's health. Studies indicate that breastfeeding may reduce a mother's risk of hemorrhage after birth, and may reduce her risk of ovarian and breast cancers. Breastfeeding also can improve a woman's ability to space her births. Full breastfeeding is associated with lactational amenorrhea, the natural breastfeeding-related suppression of the menstrual cycle—and fertility—after birth.

Mothers can effectively prevent another pregnancy by practicing the Lactational Amenorrhea Method (LAM) of family planning. LAM depends on three main conditions for effectiveness: (1) a woman's menstrual cycle must not have resumed; (2) she must currently breastfeed her infant exclusively or for the vast majority of feedings; and (3) she must be less than six months postpartum.⁴

Promotion of breastfeeding is one of the most cost-effective interventions to improve infant and child health.⁵ Breastmilk is the best and least expensive infant food. By preventing infant and child illnesses and deaths, and by enabling women to space births, breastfeeding reduces health costs.

REFERENCES:

- Sandra Huffman et al., Breastfeeding Saves Lives: An Estimate of the Impact of Breastfeeding on Infant Mortality in Developing Countries (Bethesda, MD: NURTURE/Center to Prevent Childhood Malnutrition, June 12, 1991): 6.
- 2. Ibid.
- 3. Miriam Labbock et al., *Breastfeeding: Protecting a Natural Resource* (Washington, DC: Institute for Reproductive Health, 1995): 8.
- 4. Miriam Labbock, K. Cooney, and S. Coly, *Guidelines: Breastfeeding, Family Planning, and the Lactational Amenorrhea Method LAM* (Washington, DC: Institute for Reproductive Health, 1994).
- 5. Wellstart International, *Breastfeeding Promotion: A Cost-Effective Intervention* (Washington, DC: Expanded Promotion of Breastfeeding Program, 1996).

water, and crowded living conditions can aggravate the situation and contribute to poor family health. Closely spaced children may also compete for scarce household resources, including food, clothing, and living space.

Although the overall proportion of births that are closely spaced has been declining since the 1970s, it is still high in many countries. Improved birthspacing has the greatest effect on infant survival in countries where a large proportion of the births are closely spaced and where infant mortality rates are high. Analysis of data from 25 developing countries shows that, on average, infant mortality would be reduced by one-quarter if all births were spaced at least two years apart (see Chart 2).

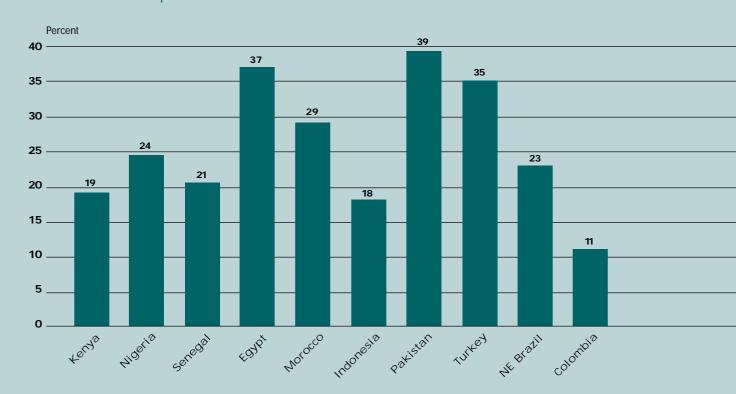
The age of the mother also affects the risk of death for a child. Children born to mothers under age 20 are more likely to die before their first birthday—one and one-half times more likely in many countries—than those born to mothers ages 20 to 29.⁵ Babies born to young mothers are more likely to be premature, have low birth weights, and suffer from complications of delivery.⁶ Young mothers are less likely to have the economic and social resources necessary to safeguard their health and that of their infants (see pp. 16 to 18).

Children born to mothers over age 40 and fourth-born or later children are also more likely to die.⁷ Older mothers are more

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C H A R T 2

Reduction in Infant Mortality if All Births Were Spaced at Least Two Years Apart



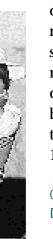
Spacing births at least two years apart could prevent an average of one in four infant deaths.

SOURCE: Unpublished analysis of Demographic and Health Surveys, 1990-1995 (Calverton, MD: Macro International, 1996).

likely to give birth to children with congenital abnormalities who may be less likely to survive childhood. In addition, older mothers often have experienced more pregnancies and births, each of which carries risks for the mother and child. Indeed, older mothers with many children are likely to be the same women who started childbearing early and had closely spaced births.

Maternal Survival

Ramily planning also saves women's lives. Most women welcome pregnancy and childbirth, yet the risks of illness and death associated with these events are very high in some parts of the world. In developing countries, maternal mortality is the leading



cause of death for women of reproductive age. In parts of sub-Saharan Africa, there are more than 1,500 maternal deaths for every 100,000 live births; in the United States, this ratio is 12 deaths per 100,000 live births.⁸

Causes of Maternal Deaths

An estimated 585,000 women die every year from

complications of pregnancy and childbirth; 99 percent of these women live in developing countries (see Box 2).9 Women in these countries face greater risks during pregnancy, childbirth, and the postpartum period because they are more likely to deliver without trained assistance and have limited access to adequate medical care in the event of complications. They are also

more likely to become pregnant—and face these same risks again and again—than women in more developed countries.

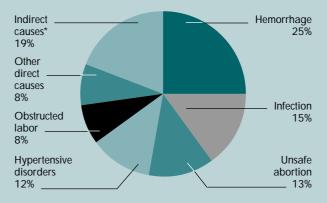
The risks associated with pregnancy and childbirth are determined not only by the quality, availability, and use of prenatal and delivery care, but also by a woman's health and nutritional status, and the number of pregnancies she experiences. Pregnancy, childbirth, and breastfeeding are physically demanding. Women who are physically and nutritionally depleted before becoming pregnant will continue to suffer once the baby is born. Severely malnourished women who become pregnant again soon after giving birth may be at high risk of illness and death.

Since the beginning of the "Safe Motherhood Initiative" in 1987, several international, governmental, and nongovernmental organizations have worked together to reduce the toll of maternal illness and death. Although there has been a small reduction in the global risk of dying from pregnancy and childbirth, the total number of women dying has actually increased because the number of births has increased. In addition, new methods of estimating maternal deaths reveal that the situation in some countries is worse than previously thought. ¹⁰

Maternal Mortality

Pregnancy can be a risky event for a woman in a developing country. One of every 48 women in a developing country risks dying from complications of pregnancy and childbirth during her lifetime. For women in more developed countries this risk is much lower, about one death per 1,800 women.¹

Causes of Maternal Deaths in Developing Countries²



*From pre-existing conditions such as malaria, anemia, heart disease, hypertension, diabetes, tuberculosis, and hepatitis made worse by pregnancy.

Some complications of childbirth, such as hemorrhage, lead to death within hours. With other causes, such as infection and obstructed labor, death may come after days of suffering.

In addition to the risk of death from pregnancy and childbirth, women can suffer from many serious complications. For every death of a woman from maternal causes, up to 100 women suffer from associated illnesses and permanent disabilities.³

Hemorrhage

Heavy and rapid bleeding, which is most likely to occur after birth or unsafe abortion, is the leading cause of maternal deaths (146,000 per year). Without immediate intervention and, in some cases, access to blood transfusions, most women who hemorrhage will die.

Infection

Overwhelming infection causes an estimated 87,000 maternal deaths each year. Sterile procedures during all deliveries and abortions, and appropriate use of antibiotics can prevent many of these deaths.

Unsafe Abortion

A minimum of 76.000 women die each year from improperly performed abortions. Since many of these procedures are illegal, it is difficult to estimate accurately the number of women turning to this procedure to end an unintended pregnancy. Unsafe abortions often result in hemorrhage and infection.

Hypertensive Disorders

Elevated blood pressure, protein in the urine, and swelling of the arms, legs, and face are signs of pregnancy-induced hypertension and pre-eclampsia. Diagnosis of these symptoms during routine prenatal care, followed by rest and treatment with appropriate medications, can reduce the incidence of hypertension-related illness and death (70,000 deaths per year).

Obstructed Labor

Women with small pelvic size, those with birth canals damaged from trauma or disease, and women carrying a very large or abnormally placed fetus are at greater risk of obstructed labor (where the birth canal is blocked). Without access to safe delivery by cesarean section, many of these women will die (47,000 deaths per year).

- 1. WHO and UNICEF, Revised 1990 Estimates of Maternal Mortality, A New Approach by WHO and UNICEF (Geneva: World Health Organization,
- 2. Anne Tinker and Marge Koblinsky, "Making Motherhood Safe," World Bank Discussion Paper no. 202 (Washington, DC: World Bank, 1993): 3.

Reproductive Health

Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters related to the reproductive system and to its functions and processes....[It includes] the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice....and...to appropriate health-care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.

Paragraph 7.2, ICPD PROGRAMME OF ACTION

This definition, agreed upon by governments participating in the 1994 International Conference on Population and Development (ICPD), represents a change in the world's view of women's health and family planning. The ICPD placed new emphasis on the need to ensure comprehensive reproductive health for women and men. Programs are to be designed to meet the reproductive health needs of women, including adolescents, while also educating and enabling men to participate more fully in family planning and child-rearing responsibilities, and to accept major responsibility for prevention of sexually transmitted diseases (STDs).¹

Reproductive health care, as defined by the ICPD Programme of Action (par. 7.6), includes the following:²

- Quality family planning counseling, information, education, communication, and services;
- Education and services for prenatal, safe delivery, and postnatal care, including breastfeeding;

- Prevention and treatment of unsafe abortion, and provision of abortion services, where legal;
- Prevention and appropriate treatment of infertility;
- Treatment of reproductive tract infections and STDs;
- Information, education, and counseling on healthy human sexuality, sexual and reproductive health, and responsible parenthood;
- Discouragement of harmful practices, such as female circumcision/female genital mutilation; and
- Referrals for family planning services and further diagnosis and treatment for complications of pregnancy, delivery, and abortion; infertility; reproductive tract infections; breast cancer and cancers of the reproductive system; and STDs, including HIV/AIDS.

Not all programs can offer the full range of reproductive health care services, but governments can work in partnership with nongovernmental organizations and businesses to provide these services through a variety of channels.

REFERENCES

^{1.} UN, Report of the International Conference on Population and Development, Cairo, 5-13 Sept., 1994 (New York: United Nations, A/CONF.171/13, 18 Oct., 1994): 13-14.

^{2.} Ibid.

Role of Family Planning in Reducing Reproductive Health Risk

Advances in medical technology over the last 35 years make it possible for all women to plan their childbearing. Family planning usually suggests the use of methods to delay or prevent pregnancy, but also includes efforts of couples to bring about pregnancy. Family planning methods include oral contraceptives (the "Pill"); injectables; subdermal implants; intrauterine devices (IUDs); male and female sterilization; barrier methods, such as condoms, diaphragms, and spermicides; and natural methods of family planning, including the Lactational Amenorrhea Method (LAM) (see Box 1, on page 4).

There is no "best method" of family planning. Most methods have a low rate of failure if used correctly and consistently and are completely safe for the majority of users. However, family planning methods vary according to their effectiveness, convenience, cost, side effects, risks, and benefits for the individual woman. Users of family planning methods are best able to evaluate the relative importance of each of these factors based on their childbearing goals, health status, relationship, and living conditions.

Family planning can prevent at least 25 percent of all maternal deaths. Family planning and other reproductive health services allow women to make choices to



TUNISIA; C. CARNEMARK/WORLD BANK

minimize their reproductive risks and maximize their health (see Box 3). Family planning helps prevent the spread of STDs,

Comparison of Death Risks from Pregnancy and Childbirth and from Use of Family Planning Methods

Women's Risk of Death from Pregnancy and Childbirth¹

of death
1 in 60
1 in 1,800
1 in 48
1 in 16
1 in 65
1 in 1,400
1 in 130
1 in 3,700
1 in 26

Risk of Death from Use of Family Planning Methods² Among Users of the Method, Ages 15-44

Method	in one year
Oral Contraceptives - Nonsmoker	1 in 63,000
Oral Contraceptives - Smoker	1 in 16,000
IUD	1 in 100,000
Long-acting hormonal methods	1 in 125,000
Diaphragm, condom,	
spermicide, sponge	0
Natural methods	0
Female sterilization- tubal ligation	1 in 67,000
Male sterilization - vasectomy	1 in 300,000

Dick of dooth

Deaths indicated are due to the method only; there are additional risks of death from pregnancy and childbirth resulting from method failure.

These data are based on family planning use in the United States. There are no reliable sources of data on method risks for developing countries. Results from a limited study in Indonesia and Egypt are consistent with the above table.³

REFERENCES:

- 1. WHO and UNICEF, Revised 1990 Estimates of Maternal Mortality, A New Approach by WHO and UNICEF (Geneva: World Health Organization, April 1996): 3, 6.
- Robert Hatcher et al., Contraceptive Technology, 16th edition (New York: Irvington Publishers,1994):125; and Susan Harlap et al., Preventing Pregnancy, Protecting Health: A New Look at Birth Control Choices in the United States (New York and Washington, DC: The Alan Guttmacher Institute, 1991): 98-99.
- 3. J. Fortney et al., "Reproductive Mortality in Two Developing Countries," *American Journal of Public Health* 76 (1986):134-38 as quoted in Deborah Maine et al., "Risks and Rights: The Uses of Reproductive Health Data," *Reproductive Health Matters* 6 (Nov., 1995): 46.

including HIV/AIDS. By reducing the number of unintended pregnancies, family planning also helps prevent abortions.

Pregnancy and Childbirth

Research indicates that the risk of dying from use of modern methods of family planning is far less than the risk of death associated with pregnancy and childbirth. This is especially true in developing countries, where women have less access to obstetric care (see Table 2).

In addition to preventing pregnancy, some family planning methods have other health benefits. For example, oral contraceptives can protect a woman against pelvic inflammatory disease, ovarian and endometrial cancers, and benign breast disease. Condoms, when used correctly and consistently, can prevent infection from STDs, including HIV/AIDS.

Decades of research on family planning methods indicate that while not all methods are appropriate for all women, there is a safe and effective family planning method for every woman. Providing all women with the opportunity to make a voluntary and informed choice of the family planning method they find most appropriate for their particular situation can improve their reproductive health.

Unsafe Abortion

In the event of an unwanted pregnancy, many women seek abortions. At least 50 million induced abortions occur every year.¹² Abortion is a very safe procedure

unsafe abortion is 100 to 500 times greater than that for abortions performed under safe conditions. At least 76,000 women die every year from the consequences of unsafe abortion (see Box 2, page 7). Thousands more



In no case should abortion be promoted as a method of family planning...and...all...are urged...to reduce the recourse to abortion through expanded and improved family planning services. Prevention of unwanted pregnancies must always be given the highest priority and all attempts should be made to eliminate the need for abortion.

Paragraph 8.25, ICPD PROGRAMME OF ACTION

when performed under sterile conditions by trained health care providers. However, an estimated 20 million unsafe abortions* take place every year in places where access to safe abortion is limited. Most of these unsafe abortions are performed in developing countries. Restrictive abortion laws do not necessarily prevent access to abortion services, but do lead to increased deaths and health problems from illegal and unsafe abortions.¹³ The risk of death from

women suffer serious complications that can result in chronic pain and infertility.

In addition to the human costs, unsafe abortion carries a severe economic toll. A large percentage of scarce hospital resources in developing countries is spent on patients admitted for treatment of abortion complications. A study in Nigeria found that 60 percent of gynecology

 $^{^{}st}$ "Unsafe abortion is defined as a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards or both." ICPD Programme of Action, Notes, p. 118.

TABLE 3

Global Prevalence of HIV Infection

Region	Adult infection rate,* mid-1996	Women, as percent of those infected
Sub-Saharan Africa	5,000	52 - 55
Caribbean	1,400	40
South and SE Asia	500	25 - 33
Latin America	500	18
North America	500	14 - 17
W. Europe	200	14 - 17
North Africa / Middle East	120	20
Eastern Europe / Central Asia	15	14 - 17
East Asia / Pacific (includes China)	4	14 - 17

^{*}Number infected per 100,000 people ages 15-49

SOURCES: UNAIDS and WHO, *The HIV/AIDS Situation in Mid-1996* (Geneva: World Health Organization, 1 July 1996), available on-line, Internet http://gpawww.who.ch/. UN, *The World's Women 1995, Trends and Statistics* (New York: United Nations, 1995): 74.

department admissions were for treatment of abortion complications.¹⁴ At Kenyatta National Hospital in Nairobi, Kenya, an average of 40 abortion cases are seen each day.¹⁵

Family planning helps prevent abortions by reducing the number of unintended pregnancies. A study in the United States found that every US\$1 increase per capita in public funding for family planning services was associated with a reduction of one abortion per 1,000 women. Other studies show that, over time, as use of effective family planning methods increases, abortion rates decline. In 1960 in Chile, less than a percent of married women were practicing family planning and the abortion rate was rabortions per 1,000 married women of reproductive age. By 1990, use of family planning had increased to 56 percent of married women, and the abortion rate had dropped to 45 per 1,000.

Women who have abortions are at high risk of having another unintended pregnancy. Studies indicate that most women who have had abortions, especially young women, were using a less effective or no method of family planning, or were using a family planning method incorrectly when they became pregnant. When offered family planning information and services following an abortion, however, these women are receptive and often adopt more effective methods. 18 Post-abortion family planning services can prevent many needless maternal deaths by breaking the cycle of unintended pregnancy followed by high-risk, unsafe abortion. Nonetheless, because no method of family planning is 100 percent effective, there will always be unintended pregnancies and demand for safe abortion services.

Sexually Transmitted Diseases, Including HIV/AIDS

Family planning promotes reproductive health by reducing the spread of STDs, including HIV/AIDS. Since the beginning of the pandemic in the late 1970s, an estimated 5.8 million people have died of AIDS, and in 1996, approximately 21.8 million people were living with AIDS or HIV (see Table 3). Currently, more than 7,500 adults and 1,000 children become infected with HIV every day.¹⁹

Four out of every ten people living with HIV/AIDS are women—approximately 8.8 million—and the proportion is growing. Biologically, women are more susceptible to HIV infection because sexual transmission from man to woman is more efficient than from woman to man. Women with STDs have an even greater risk of contracting HIV.

In 1996, 830,000 children were living with HIV/AIDS. Mother-to-child transmission of HIV during pregnancy, birth, or breastfeeding accounts for more than 90 percent of all infections in children. About one-third of all infants born to HIV-infected mothers become infected.²⁰

The cumulative total of HIV infections in men, women, and children is expected to increase to 30 to 40 million by the year 2000, of which more than 90 percent will be in developing countries. WHO estimates that over 5 million children under 10 years of age will be orphaned by the end of this decade due to the HIV/AIDS-related deaths of their mothers.²¹ As yet, there is no cure



UGANDA; J. SCHYTTE/STILL PICTURES

for AIDS, and studies indicate that the majority of HIV-infected adults will develop AIDS within 12 to 13 years of infection. Survival time for those living with AIDS ranges from less than one year in most developing countries to three years in more-developed countries for patients receiving intensive treatment.²²

Family planning is important to women and men with STDs, including HIV/AIDS, who do not want to risk infecting their partners. Aside from abstinence, barrier methods of family planning offer the best protection against both pregnancy and STDs. Latex condoms, if used properly, are the most effective way to prevent sexual transmission of HIV, but are less effective than some other methods in preventing pregnancy. Thanks to widespread educational campaigns, many people know how to prevent AIDS, and condom use is increasing throughout the world.

Many nonbarrier methods of family planning are very effective in preventing pregnancy, but offer no protection against STD infection. Couples who want the most effective protection from both infection and pregnancy may need to use two methods—condoms or spermicides for infection prevention and another method to prevent an unintended pregnancy.

The risks and benefits of each method, in relation to both pregnancy and infection, depend on an individual and should be evaluated based on his or her needs and goals.

Women's options for protecting themselves from STD infection include spermicides and the female condom; however, the effectiveness of these methods against HIV infection is still being studied. Research into a vaginal gel (microbicide) that protects from infection by several STDs looks promising. Methods that prevent infection without reducing a woman's chance of pregnancy are still a distant goal.

Women's access to information on HIV and other STDs can be increased through family planning programs that offer STD prevention education and counseling; condom promotion; STD screening, and treatment or referral; and, where appropriate, voluntary, anonymous, or confidential HIV counseling and testing. Integrated STD and family planning programs are better equipped to meet women's overall reproductive health needs.

Maternal and Child Health: *The Interaction*

mother's health can affect the health of her children. If a woman dies during childbirth or soon after, her infant and other young children are less likely to survive. Even if the mother survives, babies born to very young mothers or older mothers, and babies born close together are more likely to die during their first year. Some health problems, such as nutritional deficiencies and STDs, can compromise the survival of both mother and child.

Many women in developing countries experience a cycle of poor health that begins before they are born and persists



CAMBODIA; S. SPRAGUE

through adulthood, passing from generation to generation.²⁴ Poor health among pregnant women, due to infections and malnutrition, increases their risk of giving birth to unhealthy infants. Because of their poor health, these women often cannot adequately meet the needs of their newborn and older children. The health and nutrition of female children may be further compromised by discriminatory practices. For example, in many countries females eat last—which often means less. Such a disadvantaged beginning leads to impaired growth and development for many adolescent girls, who will then begin their childbearing years in poor health.

Reproductive health care during the critical periods of birth, adolescence, and the reproductive years can break this cycle of poor health. A strategy developed by WHO, the "Mother-Baby Package," focuses attention on the core interventions needed to make motherhood and childhood safer: family planning services, quality prenatal care, clean and safe delivery, and access to essential obstetric care.²⁵

Adolescents and Reproductive Health

Today, there are more than 1 billion young people ages 10 to 19, almost one-fifth of the world's population. Most of these young people are adolescents, a period of life that starts at puberty



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(biological maturity) and ends at the culturally determined entrance to adulthood (social maturity and economic independence). There is a great variety of experience represented by people in this age range: some

are married and considered adults in their society, others are still in school and are treated as children. Many are sexually active and have become parents themselves, but may not have achieved the legal adult age as defined by their country or state.

While adolescence is generally a healthy period of life, many young people suffer from inadequate family planning and reproductive health care. Complications of pregnancy, child-birth, and unsafe abortion are the major causes of death for women ages 15 to 19. Each year, more than 15 million girls ages 15 to 19 give birth and 2 million have unsafe abortions. Adolescents are especially at risk of infection with sexually transmitted diseases (STDs), including HIV/AIDS.

Marriage and Sexual Activity

Between 20 and 50 percent of women in developing countries are married by age 18.² Some marry even younger: between 8 and 18 percent marry by age 15.³

Many young women begin sexual activity before marriage, often against their will. Surveys show that, on average, 43 percent of women in sub-Saharan Africa and 20 percent in Latin America have had premarital sex before age 20. Sexual activity among teens is even higher in certain more developed countries: 68 percent of teens in the United States and 72 percent in France have had premarital sex by age 20.4

Pregnancy and Childbirth

In the developing world, an average of 40 percent of women give birth before the age of 20, ranging from a low of 8 percent in East Asia to a high of 56 percent in West Africa. In more developed regions, only 10 percent on average begin childbearing so early. However, in the United States the level of teen childbearing is far higher: 19 percent of young women give birth before age 20.5

The risk of dying from pregnancy- and childbirth-related causes is very high for adolescent girls. Maternal mortality rates for women ages 15 to 19 are twice as high as for women in their 20s. Young adolescent girls face the greatest health risks from pregnancy and childbirth. Because they may not have reached their full height or achieved their full pelvic size,

these girls are at greater risk of obstructed labor, which can lead to the death of both the mother and infant.⁷ Young women are also more likely to suffer from anemia and hypertensive disorders of pregnancy. Women ages 10 to 14 are five times more likely to die during pregnancy and childbirth as women ages 20 to 24.8

While the risks associated with first births are greater for all women, the dangers are compounded for adolescent girls. Because they have less experience, resources, and knowledge than adult women, adolescent girls are less likely to obtain prenatal care and the assistance they need to ensure a healthy pregnancy and birth.⁹ Their children are also likely to suffer. Children born to adolescent mothers face higher risks of illness and death than those born to mothers in their 20s (see p. 4).

Family Planning Information and Services

Adolescents are less likely than older women to use family planning. Lack of information, fear of side effects, and barriers to access and use—geographic, social, and economic—prevent young people from obtaining and using family planning methods. Most family planning services are designed to serve the needs of married, adult women, although medical experts have concluded that all women, regardless of age or marital status, should be screened according to the same medical eligibility criteria. In

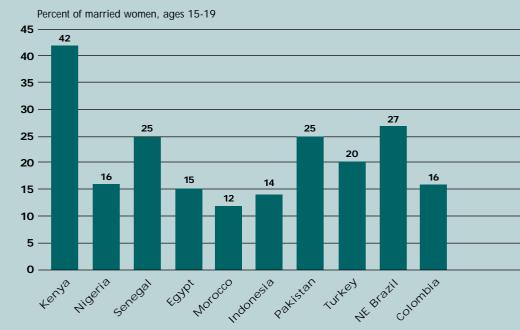
addition, the benefits of family planning use generally outweigh any risks related solely to the age of the user. 10 Even where there are no legal barriers to services for teens, service providers are not always receptive to young clients. Young men, who often begin sexual activity before young women and who have more sexual partners, have an even more difficult time obtaining information and services than adole-scent women. 11

Surveys indicate that between 12 and 42 percent of married adolescent women in developing countries want to space or limit births, but are not using family planning *(see Chart)*. This translates into 3 million adolescent women in sub-Saharan Africa; 8.6 million in Asia, the Near East, and North Africa; and more than 1 million young women in Latin America. ¹² If unmarried, sexually active teens were included, the numbers would certainly be higher.

Abortion

Each year at least 2 million teenagers undergo unsafe abortions to end unwanted pregnancies, and studies indicate that the rate of adolescent abortion is increasing in many countries.¹³ Even where safe abortion services are available. access is often restricted for young women. As a result, they turn to unsafe abortion, often late in the pregnancy, as a desperate attempt to avoid the consequences of early childbearing. Unsafe abortions, which may be self-induced, often result in severe illness and death.

Unmet Need* for Family Planning Among Married Women Ages 15-19



On average, one in five married women ages 15 to 19 needs family planning.

* Women who want to space or limit births but are not currently using family planning.

SOURCE: T. McDevitt et al., *Trends in Adolescent Fertility and Contraceptive Use in the Developing World* (Washington, DC: U.S. Bureau of the Census, March 1996): Table 19; and Demographic and Health Surveys for Egypt, Morocco, Indonesia, and Colombia (Calverton, MD: Macro International, 1996).

In some countries, complications from unsafe abortions are the leading cause of death among teenagers. A study in Nigeria found that 72 percent of all deaths among women under age 19 are the consequence of unsafe abortions. If Girls who survive unsafe abortion often suffer from complications that lead to infertility, which can have dire consequences for an adolescent girl whose future may depend on her childbearing ability.

Sexually Transmitted Diseases and HIV/AIDS

The highest rates of infection with STDs, including HIV, are found among young people ages 20 to 24. Teens ages 15 to 19 have the next highest rates of STD infection. WHO estimates that half of all people infected with HIV are

younger than age 25, and in developing countries, up to 60 percent of all new infections are among 15 to 24 year-olds. ¹⁶ Adolescents are at high risk of STD infection because they often have short-term sexual relationships and do not consistently use condoms to protect themselves.

Adolescents often lack the information and self-confidence necessary to protect themselves from STDs. Educational campaigns and STD prevention and treatment services usually target men and prostitutes, making it difficult for young women to obtain care. Young women also find it difficult to negotiate abstinence and condom use with their partners.

Female Circumcision

An estimated 85 to 114 million women in over 30 countries have undergone some form of female circumcision or female genital mutilation (FGM)—the cutting and removal of all or part of external female genitalia.¹⁷ While female circumcision is believed to be an important part of a girl's initiation into womanhood in some cultures, it can have severe psychological, social, and physical health consequences. Usually performed by traditional practitioners under unsafe conditions, female circumcision can cause hemorrhage, infection, shock, and even death. Later complications may include scarring, damage to the urethra

and anus, painful intercourse, urinary tract infections, and greater risks of STDs and obstructed labor. The 1994 International Conference on Population and Development (ICPD) recognized that female circumcision/FGM is a violation of human rights and ethical medical principles and should be eliminated.

Solutions

At several international conferences and conventions in the 1980s and 1990s, including the 1989 Convention on the Rights of the Child, governments repeated their commitment to a universal agenda for action to improve the health of adolescents. ¹⁹

- Provide health education to adolescents, both men and women, including information on: sexuality, responsible sexual behavior, reproduction, abstinence, family planning, unsafe abortion, STDs including HIV/AIDS, and gender roles.
- Encourage parental involvement and promote adult communication and interaction with adolescents.
- Use peer educators to reach out to young people.
- Provide integrated health services to adolescents that include family planning information and services for sexually active adolescents, and promotion of voluntary abstinence.
- Make health services adolescentfriendly by ensuring confidentiality, privacy, informed consent, and respect.

- Increase opportunities for women's education and employment.
- Eradicate female circumcision.

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Investing in the Health of Mothers and Children

Demand for Family Planning

There is a large and growing demand for family planning. Worldwide, more than half of all married couples are practicing family planning, although the percentages range from fewer than

Unfortunately, many people are not fully informed about family planning. When women who need family planning are asked why they are not using a method, the most common responses are lack of knowledge, fear of side effects, and husband's



"Access is not only a question of how distant her home is, or how much the transportation costs... We have to ask what is the attitude of the husband,... of the mother-in-law,... of the neighborhood, of the family, of the city, of the society at large with respect to that woman using that method?"

Dr. Aníbal Faúndes, Brazil²⁶

10 percent in many countries in sub-Saharan Africa to more than 70 percent in most more developed countries. An estimated 150 million women in the developing world want to delay or stop childbearing, but are not using family planning.²⁷ In some countries, more than one-quarter of all married women need family planning, but are not using it (see Chart 3, next page). Millions more married and unmarried women need more appropriate and effective methods to meet their reproductive goals. Meeting the existing demand for family planning in the developing world would reduce the number of pregnancies by up to 20 percent, and would bring about an equivalent drop in the number of maternal deaths and injuries.²⁸

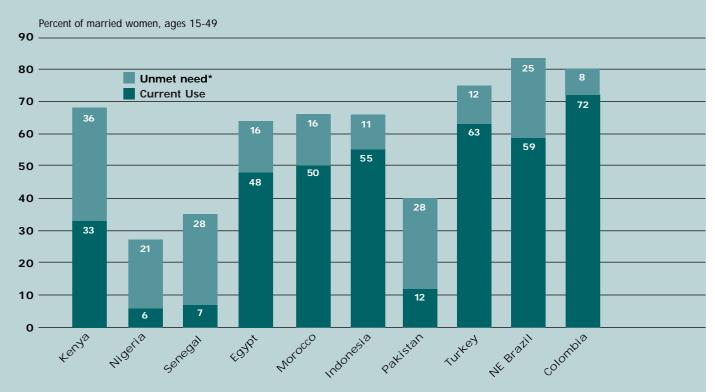
disapproval. The limited number of male methods of family planning and inadequate information provided to men also prevent many couples from practicing family planning. Although lack of access to services has been found to inhibit use, it is not an overriding obstacle. Most women want to control childbearing, but many cannot overcome a range of social, familial, financial, religious, and medical obstacles.

Couples' needs for family planning change during their reproductive lives. While temporary methods of family planning are appropriate for couples

CHART

Demand for Family Planning

(Demand = Current Use + Unmet Need)



There is a large and growing demand for family planning among married women in developing countries.

*Women who want to space or limit births but are not currently using family planning.

SOURCE: Demographic and Health Surveys, 1990-1995 (Calverton, MD: Macro International).

who want to space their pregnancies, those who have reached their childbearing goals need effective, long-acting, or permanent methods. In the event of a method accident or unprotected sexual intercourse, many couples can safely and effectively prevent an unintended pregnancy by using emergency contraception. However, few women are familiar with the emergency methods that can be used and few providers offer them.²⁹

Many couples who use family planning need more information or a more appropriate method. The major reasons women give for discontinuing use of a method are health concerns and side effects. When offered a wide range of methods and when fully informed of potential side effects, couples are more likely to continue using family planning and switch to new methods when necessary.

Cost of Family Planning

Family planning is a cost-effective health intervention that has immediate benefits for women, children, and families. In addition to preventing deaths, family planning can reduce the burden of illness among women and children, thus reducing health costs.

The provision of a minimum package of essential clinical and public health services that includes family planning can be achieved at a cost of about US\$15 annually per capita.³⁰ Such an investment would reduce the total burden of illness in developing countries by an estimated 25 percent—or the equivalent of 9.3 million infant deaths.³¹ Family planning would cost just US\$.90 to US\$2.20 annually per capita.³²

Cost-effective as these health investments may be, they still represent substantial costs for most developing countries, where the average annual investment in health care is US\$21 per capita. Little of this currently goes to pay for effective public health measures. Reallocating public expenditures away from less cost-effective services, increasing donor contributions, and greater use of the private sector by those able to pay for services would cover the costs of basic health care for all.³³

Approximately three-quarters of the costs of family planning activities are currently paid for by public and private, developing-country

institutions. The remainder is provided by international donors, 90 percent of which is contributed by just eight countries: the United States, Germany, Japan, the United Kingdom, Sweden, the Netherlands, Norway, and Denmark. Less than 2 percent of all international aid (Official Development Assistance) goes to family planning and population activities.³⁴ In order to meet the demand for family planning and achieve the reproductive health goals outlined at

Family planning could bring more benefits to more people at less cost than any other single 'technology' now available to the human race.

UNICEF³⁵

the ICPD, overall funding for family planning and reproductive health will need to reach an estimated US\$17 billion annually by the year 2000 (US\$10 billion for family planning and US\$7 billion for related reproductive health services).³⁶ If international donors contribute one-third of the total, as estimated by the ICPD, their commitments will need to increase from an estimated US\$1.2 billion in 1994 to US\$5.7 billion in the year 2000.³⁷ Developing-country expenditures will need to increase to an estimated US\$11.3 billion in the year 2000.

Actions

he number of couples in need of family planning is large and continues to grow. More than half of couples in the developing world now use family planning, compared with 10 percent just over 30 years ago. Despite this dramatic increase in use



of family planning, there are now more women not using family planning than there were three decades ago, because of rapid population growth.

Throughout the world. governments are aware of both the

need for and the benefits of family planning. At a series of global conferences in the 1990s and earlier human rights conventions, governments renewed their commitment to improving sexual and reproductive health and rights for all individuals. The following actions, agreed

to by representatives from the majority of the world's countries, serve as the international agenda for governmental and nongovernmental leaders.³⁸ Implementing these actions and committing the necessary resources can save millions of lives, and will help all couples reach their reproductive goals and enable them to have healthy children.

- 1 Provide universal access to a full range of safe and reliable family planning methods as part of comprehensive sexual and reproductive health services.
- Remove barriers to family planning use, including unnecessary legal, medical, clinical, and regulatory barriers.
- 3 Develop policies and programs to meet the need for family planning information and services.
- 4 Initiate public education campaigns, using community groups where possible, on family planning, responsible parenthood, and reproductive choices and rights.
- 5 Design specific programs for men of all ages, including adolescents, that provide information, education, and counseling to promote responsible sexual and reproductive behavior.

- Provide condoms for family planning, as well as for the prevention of STDs and HIV/AIDS.
- 7 Link family planning programs to broader reproductive health programs, especially by integrating family planning with maternal and child health.
- Provide appropriate family planning information, counseling, and services to sexually active adolescents, including information on prevention of STDs and abstinence.
- 9 Include family planning in all postpartum and post-abortion care services.
- Actively promote voluntary, informed choice and informed consent in all family planning programs.
- 11 Improve the quality of family planning services by:
- Ensuring safe, affordable, accessible, acceptable, and convenient services;
- Ensuring accurate information about and access to the widest possible range of safe and effective family planning methods;
- Protecting users' rights to privacy;
- Providing full information on all health risks and benefits of methods;
- Ensuring a sufficient and continuous supply of high-quality contraceptives; and
- Ensuring adequate follow-up, especially for side effects.

- Provide referrals for sexual and reproductive health services, including pregnancy and abortion-related services, further diagnosis and treatment of STDs, including HIV/AIDS, and infertility.
- 13 Improve provider competence through expanded training in family planning, and sexual and reproductive health care.
- Increase access to family planning services by encouraging private-sector employers and workers' organizations to put in place reproductive health care programs for their employees and members.

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